

5	{	Nasal groove less than half the length of bill ; bill never longer than head	<i>Charadriinæ</i> , p. 32
		Nasal groove more than half the length of bill	6
6	{	Tarsi reticulated throughout ; bill long	<i>Hæmatopodinæ</i> , p. 35
		Tarsus with transverse shields in front	7
7	{	Bill always longer than head ; eyes very large ; no seasonal plumage	<i>Scolopacinæ</i> , p. 37
		Bill various ; eyes normal ; a more or less distinct seasonal plumage	<i>Totantinæ</i> , p. 35

Family PARRIDÆ

Jacanas

THE single character given in the key (*antea*)—viz. the enormously lengthened toes and straightened claws—is sufficient to distinguish the birds of this family from all other *Limicoline* species. The alliance with the plovers and connected families is, however, somewhat artificial, and many arguments have been adduced for considering these birds as more closely connected with the rails.¹

The family consists of about twelve forms, spread over the tropics of Asia, Africa, America and Australia.

Hydrophasianus chirurgus

The Pheasant-tailed Jacana or Lotus Bird

Tringa chirurgus, Scop., *Del. Flor. et Faun. Insubr.*, ii., 1786, p. 92 (Philipp.).

Parra sinensis, Kelham, *Ibis*, 1882, p. 185.

Hydrophasianus chirurgus, Oates, in Hume's *Nests and Eggs Indian Birds*, (2nd ed.), iii., 1890, p. 358 ; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 220.

Hydrophasis chirurgus, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 78 ; Oates, *Cat. Birds' Eggs, Brit. Mus.*, i., 1902, p. 71.

Malay Name.—Burong teratai.

Description.—*Adult in breeding plumage.*—Head to nape, throat and chest, white ; back of head and a narrow line bordering the throat and hind neck, black ; back of the neck, shining straw-yellow ; back and scapulars, dark brown with a bronzy lustre, the scapulars paler. Bastard wing, black with white tips ; upper wing coverts white, the lesser ones with a buffy wash. Outer primary black, the rest black with an increasing wedge of white until the innermost are almost entirely white, with black tips ; secondaries white, the innermost brownish ; axillaries and under wing coverts white. Under surface sooty black, the under and upper tail coverts deeper black ; tail, lengthened, black, with a bronzy lustre.

Adult in winter plumage.—Above, bronzy brown, the feathers with darker centres and paler edges, the longer tail coverts barred with black and white at

¹ Lowe, *Ibis*, 1925, p. 132 *et seq.*

their tips. Head, dull rufous brown, the feathers of the forehead barred with black and white. From the nostril a white stripe running near the eye and broadening into golden yellow on the sides of the neck, and bordered above with black-and-white barred feathers, a black stripe running from the lores, under the eye, and round the throat, expanding into a dark chocolate-brown patch on the breast. Chin and throat white, the fore neck marked with buff, the rest of the under parts white. Primaries and secondaries as in summer, but the inner upper wing coverts greyish brown, on their outer webs barred with whitish and brown on their inner webs, and at the tips. Middle pair of tail feathers brownish, the rest white.

Immature.—Lack the straw-yellow patch on the neck, but the head is more sandy rufous, and the feathers of the back and mantle are edged with the same. The black patch on the upper breast is more irregular and broken up into spots and bars.

Adult and young birds at all ages have a short sharp spur at the angle of the wing; the outermost and sometimes the second and third primaries are prolonged for about three-quarters of an inch into a filamentous appendage, which broadens somewhat towards the tip. The fourth primary, and to a less extent the fifth, are narrowed to a sharp point, but have no appendages.

Soft Parts.—*In breeding plumage*: iris, brown; bill, bluish; legs and feet, pale plumbeous. *In winter plumage*: iris, dark; bill, bluish sea-green, darker at base; feet, sea-green (Robinson and Kloss).

Dimensions.—Total length, 8·6 in.; wing, 8·7 in.; tail, 2·7 in., middle pair of feathers, about 10·5 in.; tarsus, 2·2 in.; bill from gape, 1·3 in.

Range in the Malay Peninsula.—Known from very few localities, but occurs as far south as Malacca. Not on any of the islands.

Extralimital Range.—Throughout India and the Indo-Chinese countries to South China, the Philippines and Formosa. Found in Java and Southern Borneo, but not in Sumatra.

Nidification.—Nests and eggs are not recorded from Malaya or from Siam, though in that country it probably breeds in June and July. In India it breeds in swamps, making a nest of reeds and rushes, often floating or semi-floating, and but little raised above the surface of the water. Different accounts give the number of eggs as from three to seven, though four seems to be the normal number. Oates describes them as quite plain, without a trace of any markings, and ranging through rich bronze, olive-brown, purplish brown, olive-green, clear brown and dull yellowish. He also states that they appear to bleach during the progress of incubation. The shell is extremely glossy, and very "peg-topped" in shape. The average dimensions of fifty eggs are given as 1·46 by 1·12 in.

Habits.—There are very few records of this bird from the Malay Peninsula. Kelham found it near Kuala Kangsar; Butler met with it on the lower reaches of the Pahang river, and Seimund has obtained two or three specimens in the vicinity of Kuala Lumpur; it has also occurred in Malacca. In the north it is probably commoner, and Kloss and myself secured a specimen at Koh Lak in Peninsular Siam. In Siam proper it is a fairly common breeding

bird. It is probably, however, not so uncommon in Malaya as the records would appear to indicate, as only in a few places are there sheets of water sufficiently large to suit it. Seimund's birds were obtained at the edges of old mining-holes, and the one bird I have myself seen in the Peninsula proper was at the edge of a slow-flowing stream running through swampy ground.

Wherever it occurs the species is said to be strictly sedentary, though it is significant that the only Malayan specimens are all in winter plumage. The extraordinarily elongated toes in this and other jacanas enable the birds to run about on broad-leaved water-plants. The food is insects found on plants and small shells picked up by the edge of the water. The call is said to resemble the mewling of a kitten.

Note.—Though not a common bird, I have included this jacana in the present volume as representative of its family. The only other species occurring in Malaya, *Metopidius indicus*, is equally rare. It has the same long legs and toes as the present bird, but the absence of the peculiar elongated tips to the outer quills and the possession of a frontal lappet to the bill will serve to distinguish it. All adult birds are entirely black below, and the tail is never elongated.

Family BURHINIDÆ

Stone Plovers or Stone Curlews

THIS small family has important cranial characters which separate it from the rest of the order; in many respects the group comes closest to the bustards. The bill is massive and nearly straight, varying in relative length in the different species. The legs are long, covered with hexagonal scales both in front and behind; there is no hind toe. Tail short, less than half the wing. Eyes very large.

All the species are fair-sized birds (wing up to 11 in.), with plumage of dull neutral tints of pale brown, sandy buff and whitish, often much streaked with blackish brown. They are normally inhabitants of dry semi-desert areas or upland downs, or of sandy seashores. One species, *Burhinus ædicnemus*, the Norfolk plover, is a British bird, which occurs in a modified form in India and Siam.

The group is distributed over nearly the whole world except the Arctic regions, the southern portion of South America and Oceania and New Zealand.

One species, *Orthorampus magnirostris*, the Australian stone plover, has been met with on two occasions within our area, at the extreme north of the Malay Peninsula, De Lisle Island, and at the extreme south, Pulau Bintang, so that it is not unlikely to occur in the intermediate regions.

Family DROMADIDÆ

Crab Plovers

THIS family contains a single species only, whose affinities have been much discussed. The bill is stout, rather longer than the head, with the lower mandible

slightly bent upwards. The legs are long, covered with transverse scutes, not scales, in front and behind; the toes are webbed. Tail short, about one-third the length of the wing.

The plumage is mainly white, the upper back and wings black. Total length, about 17 in.; wing, 8.5 in. The single species is found over the shores of the Indian Ocean, Red Sea and Persian Gulf and the Andaman and Nicobar Islands. Four specimens have been obtained on the coast of Selangor, being the most easterly locality recorded. The bird will be described in detail in a later volume.

Family GLAREOLIDÆ

Coursers and Pratincoles

THIS family consists of some thirty species, confined to the drier and hotter portions of the Old World, where they frequent sandy and stony plains, deserts, the beds of large rivers, and the like.

The species vary in size from little larger than a lark to that of a golden plover, or larger; their plumage, in accordance with the type of country affected, is sandy, buff or brown, often with a dark collar on the breast.

Most of the species are strictly sedentary, but some of the genus *Glareola*, to which the only Malayan species belongs, are highly migratory.

Apart from the characters shown in the key, our species may be recognized by its swallow-like form, strongly forked tail, and by the fact that the inner margin of the middle claw is pectinate or comb-like.

Glareola pratincola maldivarum

The Eastern Pratincole or Swallow Plover

Glareola (Pratincola) maldivarum, Forster, *Faun. Ind.*, 1795, p. 11 (Maldives); Herbert, *Journ. Siam. Soc., Nat. Hist. Suppl.*, vi., 1926, p. 345.

Glareola orientalis, Leach, *Trans. Linn. Soc.*, xiii., 1821, p. 132, pl. 13; Oates, *Birds, Burma*, ii., 1883, p. 361; *id.* in Hume's *Nests and Eggs Indian Birds* (2nd ed.), iii., 1890, p. 319; Kelham, *Ibis*, 1882, pp. 6, 7; Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 58; Blandford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 214; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 78, pl. 3, figs. 5 and 6.

Malay Name.—Kedidi padang; nok ee reit (*Siamese*).

Description.—*Adult.*—General plumage above, including the scapulars and tertials, earthy brown with an oily gloss; back of the neck paler, forming an almost imperceptible collar; lores, black. Primaries and outer secondaries, glossy black, the inner secondaries assimilating to the colour of the back, with narrow white edges to the tips. Shaft of the outer primary, whitish brown above, white below. Feathers at the angle of the wing, mingled black and white, tinged with rufous; lesser under wing coverts and axillaries, chestnut, the greater ones black. Tail, white, the feathers broadly tipped with brownish

black, broadening and becoming paler towards the centre pair; upper tail coverts white. Below, chin and foreneck, pale rufous, a narrow black line, starting from below the eye, encircling the lower throat. Upper chest and sides of the breast like the back, generally with paler edges to the feathers. Lower chest, pale rufous; belly, under tail coverts and flanks white.

Immature.—Feathers of the upper surface with paler edgings, tail feathers with blackish tips, the rest of the darker portion, earthy brown. Primaries much browner than in the adult; ring round the throat very indistinct, and rufous on the lower chest absent. Older birds merely lack the rufous.

Fledgelings (which do not occur in Malaya) are described by Oates as mixed pepper and salt, the black predominating.

Soft Parts.—Iris, dark; bill, black, crimson at base; feet, greyish black.

Dimensions.—*Male*: total length, about 11 in.; wing, 7·4 in.; tail, 3·2 in.; bill from gape, 1·05 in.; tarsus, 1·4 in. *Female*: rather smaller.

Range in the Malay Peninsula.—Sporadic in the Peninsula from north to south. Doubtful in Penang. Abundant in Singapore at certain seasons.

Extralimital Range.—Very widely spread in the plain country, India, Burma, Tenasserim, Siam and China. On migration, in the Andamans and Nicobars, Java, Borneo, Sumatra, North Australia. Breeding in Eastern Siberia, Sind (?), Ceylon, Southern Burma and Siam (Blanford).

Nidification.—The swallow plover is definitely not a breeding bird in the Malay Peninsula, though eggs from Siam are in the British Museum. In Pegu, Oates describes the eggs as laid on the bare ground in sandy paddy-fields, two, or rarely three, being the clutch. The ground-colour is from nearly white to olive-stone, densely blotched and spotted with blackish brown. The average dimensions are 1·18 by 0·93 in.

Herbert (*loc. cit.*) gives a detailed account of the breeding habits in Central Siam, where the nesting season is from late February to the end of June. Two or sometimes three eggs constitute the clutch, the eggs being rather chalky and without gloss. The average dimensions agree with those given by Oates, being 1·18 by 0·93 in. (30 by 23·5 mm.).

Habits.—The Eastern Pratincole occurs only in large open spaces, rice-fields in stubble and the like. It is a bird of passage with us, though it is probable that some birds spend two or three months in the Peninsula. In some years it is very common, while in others hardly a bird is to be seen. The birds spend most of their time on the ground, and when flushed do not fly very far, but in the morning and late afternoon make extended flights, especially after heavy rain, hawking for insects like a swallow.

Herbert says that they have quite a plover-like call, from which they derive their Siamese name. Usually they occur only in small flocks, up to a dozen or so, but at Kuala Kangsar, Perak, late in February, Kelham found them in immense numbers, evidently preparing for the spring migration. In Singapore the same observer met with them in March and again in September and October, and notes their extreme tameness. The migration routes are unknown, and the species is not one of the birds occurring at the lighthouses during the autumnal migration.

Sub-family *Charadriinæ*

THE family *Charadriidæ* is divided by many authors into numerous sub-families, but for the purposes of this work I propose to recognize only four, in this respect following Blanford's arrangement in vol. iv. of the *Fauna of British India*, 1898. The first sub-family *Charadriinæ* includes the turnstones, the wattled plovers, spur-winged plovers and lapwings, the true plovers, ring-necked plovers and dotterels. The characters are varied, but all members of this group agree in having a bill that is never longer than the head and that, in most cases, is swollen at the top. The tarsus is long, always covered with hexagonal scales, not plates, behind, and generally in front also; the hind toe is absent in many species.

The plumage is black, white, brown, or ashy and grey, or combinations of those colours.

Some species have spurs at the angle of the wing and coloured wattles on the face. Many of the forms are sedentary but others are highly migratory; the latter section has a very distinct breeding pelage.

Eggs are always four in number, very pointed at one end, and protectively coloured, being laid in the open. The young are hatched covered with down, and are able to run and fend for themselves from birth.

The family is a large one, cosmopolitan in range. About fourteen species are met with in the Malay Peninsula, and of these I have selected two for description here.

KEY TO THE SPECIES OF CHARADRIINÆ HERE DESCRIBED

- | | | | |
|---|---|----------------------------------|--|
| 1 | { | With a spur on the wing and with | |
| | | vermilion lappets and eye ring. | <i>Lobivanellus indicus atronuchalis</i> , p. 32 |
| | | No spur or lappets | 2 |
| 2 | { | Lower plumage mainly black | <i>Pluvialis apricarius fulvus</i> (breeding), p. 34 |
| | | Lower plumage whitish brown. | <i>Pluvialis apricarius fulvus</i> (winter), p. 34 |

*Lobivanellus indicus atronuchalis***The Burmese Wattled Lapwing**

Lobivanellus atronuchalis, Blyth in Jerdon, *Birds, Ind.*, iii., 1864, p. 648; Kelham, *Ibis*, 1881, p. 531; id. *op. cit.*, 1882, p. 10; Oates in Hume's *Nests and Eggs Indian Birds* (2nd ed.), iii., 1890, p. 344.

Sarrcogrammus atronuchalis, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 152; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 226; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 10.

Lobivanellus indicus atronuchalis, Herbert, *Journ. Siam. Soc., Nat. Hist. Suppl.*, vi., 1926, p. 347.

Malay Names.—Burong duit-duit; burong minta duit: nok too wit (*Siamese*).

Description.—*Adult.*—A small blunt spur at the angle of the wing. Head

and neck all round black ; ear coverts and a small area in front of and behind them, white ; remainder of the under surface and under tail coverts, white, with a slight fawn tinge in freshly moulted birds. A narrow white collar round the hind neck ; mantle, back, scapulars and secondary coverts, brown, with an oily gloss, purplish on the median coverts ; greater secondary coverts with broad white tips, forming a bar on the wing. Primaries and primary coverts, black, secondaries black, white at the bases, the amount of white increasing on the inner ones, which are mostly white. Upper tail coverts and tail, white, the latter with a median black bar, the centre pair of feathers with the black bar edged with greyish brown towards the base, and with a brownish tip. Under wing coverts and axillaries, white, the quill lining, blackish, the bases of the primaries white.

Immature.—The throat, white, and the feathers of the upper surface with lighter margins ; crown of the head, brownish black.

Soft Parts.—Iris, dark hazel or hazel-brown ; eye wattles, lappets and terminal half of bill, crimson, distal half, black ; tarsi, pale whitish yellow ; feet, greenish yellow. Oates (*Birds, Burma*, ii., 1883, p. 374) records the irides as crimson. All our birds have them as above.

Dimensions.—Total length about 12·5 in. ; wing, 8·2 in. ; tail, 4·35 in. ; tarsus, 3 in. ; bill from gape, 1·3 in.

Range in the Malay Peninsula.—Throughout the Peninsula. The islands of Junk Zeylon (Salanga), the Langkawi group and those in the Bandon Bight. Not recorded from Penang. At one time in Singapore but probably now extinct there.

Extralimital Range.—The Indo-Chinese countries, north to Manipur and east to Cochin-China ; Sumatra.

Nidification.—The nesting season is in May and June, and four eggs are laid, generally in a small hollow on a sandbank in a river-bed. They are very pointed at one end, stone or buffy brown in ground-colour, with large blotches of black and olive-brown or green, some of the marks appearing beneath the surface of the shell. They measure about 1·73 by 1·23 in.

Habits.—Common and resident throughout the Peninsula, this lapwing is naturally much more abundant in the northern and eastern portion, where the terrain is more suitable to the bird's habits. It is essentially a bird of open spaces, frequenting sandy plains near the coast, ploughland along the courses of the larger rivers, and patches of grazing-land surrounded by bushes and secondary jungle, especially where there are shallow pools of standing water. In such situations one finds it in parties of five or six up to fifteen or twenty individuals. The birds are not particularly shy, but when shot at once or twice take flight to some considerable distance. The food is vegetable matter, worms, grubs, insects and small shells found in damp situations, and the call is a plaintive cry, uttered generally on the wing and well rendered by the vernacular name, *duit duit*, or *mintá duit*.

Note.—Doubts may be cast on the occurrence of this bird in Singapore. Kelham's specimens, which were carefully described, were shot in a swampy valley behind the Tanglin barracks, on 21st September 1879.

*Pluvialis apricarius fulvus***The Eastern Golden Plover**

Charadrius fulvus, Gmel., *Syst. Nat.*, i., 1788, p. 687 (Tahiti); Dresser, *Birds of Europe*, vii., 1871, p. 443, pl. 517, figs. 2 and 3; Kelham, *Ibis*, 1882, pp. 8, 189; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 234.

Charadrius dominicus, P. L. S. Müll.: Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 195.

Malay Name.—Burong kəriyut.

Description.—*Adult in winter plumage.*—General colour above, mottled black, whitish, dirty buffy brown and golden yellow, the scapulars and wing coverts, earthy brown, barred and toothed with white; forehead and superciliary stripes, buffy white, sometimes with narrow brown shaft stripes; ear coverts, dull brown; sides of the face and throat, pale fulvous, streaked with brown; chest, sides of the breast and flanks, whitish brown, streaked and edged with earthy brown; middle of the breast, belly and under tail coverts, white, the latter faintly and irregularly barred with brown. Primaries, black, the median portions of the shafts white; primary coverts, brownish black, broadly edged with white, secondaries the same, narrowly edged on the inner webs with white. Wing lining, axillaries and under wing coverts, smoke-grey, the latter with paler edges. Tail, dark brown, brownish grey towards the base, the tip toothed on both webs of the feathers with white or yellowish white.

Adult in breeding plumage.—The under surface in adult males is deep black, except on the flanks and under tail coverts, which are white. Black element in the upper plumage in greater proportion, and the golden yellow spots larger and brighter. Forehead, superciliaries and a band on each side of the neck, white. Females never have the black under surface so uniform.

Soft Parts.—Irides, dark hazel; bill, greenish black, paler at base; feet, plumbeous black, or black with a greenish tinge, occasionally pale greyish green.

Dimensions.—Total length, about 10 in.; wing, 6.3 in.; tail, 2.4 in.; tarsus, 1.6 in.; bill from gape, 1.2 in.

Range in the Malay Peninsula.—Probably along both coasts of the Peninsula and on all the islands; certainly in Penang, Junk Zeylon (Salanga) and Singapore.

Extralimital Range.—The whole of Asia, except the more western portion, and the greater portion of the Pacific and Australia. In America a slightly larger form occurs. The European golden plover also differs in being larger, with pure white, not smoky grey, axillaries.

Nidification.—Breeds on the Siberian tundras, in Kamchatka and other sub-Arctic localities in Northern Asia. Never in the Malay Peninsula.

Habits.—Common in the Malay Peninsula and on the larger adjacent islands from September to May. It is found in large flocks on the coast and also in open plains and fallow ricefields in the interior, but never, of course, in wooded country. The call is *kəriyut-kəriyut*, several times repeated. In Singapore Kelham records the bird as common from October to April, in such localities

as Tanglin, Cluny, Trafalgar Estate and Galang, and it is fairly abundant at this season on the golf-links and race-course, Kuala Lumpur.

Towards March, specimens may be obtained which have commenced to acquire the black nuptial plumage, but birds in full livery are rare, though Kelham records one from Kuala Kangsar, shot on 12th April.

Even on the coast I have found this plover quite good eating, but, like many birds frequenting the mud-flats, they have to be skinned before cooking.

Sub-family *Hæmatopodinae*

Oyster-catchers and Stilts

THOUGH Blanford has (*Faun. Brit. Ind., Birds*, iv., p. 245) brought the oyster-catchers and stilts together into one sub-family, he himself admits that the alliance is not a very rational one. Sharpe has kept them apart.

One of the characters the grouped genera possess in common is a very long bill, sometimes very slender and never swollen at the tip; the legs are always covered with scales, generally hexagonal, never with transverse scutes.

The colours are black and white or grey, alone or in combination.

Oyster-catchers, which have not as yet been recorded from Malaya, are medium-sized birds, black, or black and white, in coloration, the legs comparatively short, and the bill compressed, straight, about 3 in. in length, and bright orange-red in colour.

The black-winged stilt (*Himantopus himantopus*), of whose occurrence in the Malay Peninsula there are scattered records, is a white bird, the back and wings, greenish black; length, about 15 in.; bill long (3 in.), straight and very slender; tail, short; legs, long (about 5 in.).

Sub-family *Totantinae*

Curlews, Godwits, Sandpipers, Stints and Phalaropes

THE members of this miscellaneous assemblage agree in having a somewhat slender, lengthened bill, variable in length and curvature, and in having the tarsus with transverse shields in front and behind—except in the curlews, in which the back is scaled. Tail short in all. Wings long and pointed.

All the species have distinct winter and summer plumages, but the sexes are alike except in the case of the ruff, a rare and casual visitor to Malaya.

The phalaropes, by some placed in a distinct sub-family, can be distinguished from all the other genera by the possession of lobed or scalloped toes like a coot or grebe.

The group is well represented in Malaya, but all the species are winter visitors, none remaining to breed. Nearly all are confined to the seashore or to estuaries or mud-flats, and will be described in due course. I have selected one species, the common sandpiper—found all over the country—for description in this volume.

*Tringoides hypoleucus***The Common Sandpiper**

Tringa hypoleucos, Linn., *Syst. Nat.*, i., 1758, p. 149 (Sweden).

Actitis hypoleucus, Jerdon, *Birds, Ind.*, iii., 1864, p. 699.

Totanus hypoleucus, Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 260.

Tringoides hypoleucus, Kelham, *Ibis*, 1882, p. 18; Oates, in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), iii., 1890, p. 352; Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1898, p. 456; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 45.

Malay Name.—Kedidi or kedidi kēlichap.

Description.—*Adult in winter plumage.*—The whole upper parts, brownish olive, with a distinct bronzy gloss, greyer on the head and nape, the feathers with dark shaft stripes, and with a subterminal dark bar and whitish or whitish buff tip. Tertiaries regularly toothed with black and buff on the edges of each web. Primaries, blackish brown, with a large white spot on the inner webs of the inner ones, and with narrow white tips, secondaries mainly white, the inner ones entirely so. Primary coverts and bastard wing, blackish, tipped with white, the greater median series, olive-brown, broadly tipped with white, forming a bar on the wing; under wing coverts mingled blackish and white. Tail feathers, banded dark brown and white, and toothed with brown and buff—all except the central ones with broad white tips. Sides of the face, the ear coverts and lores darker; a broad, pale superciliary stripe. Under surface, white, the sides of the breast brownish, and the throat often with narrow pale brownish shaft stripes.

Adult in breeding plumage.—Not very different from the winter plumage, but with the upper surface darker and greyer, with less of the bronzy gloss; the tertiaries not toothed with black and buff, and the lesser wing coverts much more uniform; under surface more distinctly striped on the throat and the brown patches at the sides of the breast darker and more distinct.

Soft Parts.—Iris, dark; bill, greenish black, paler at base; feet, greenish grey, yellower at knees.

Dimensions.—Total length, about 8 in.; wing, 4·3 in.; tail, 2·4 in.; tarsus, 0·95 in.; bill from gape, 1·1 in.

Range in the Malay Peninsula.—Throughout its whole length and on all the islands.

Extralimital Range.—The whole of the Old World.

Nidification.—Does not breed in Malaya. Nests and eggs have been found in Kashmir, but like other limicoline birds the main breeding-grounds are in the more northern parts of Europe and Asia.

Habits.—This little sandpiper may be seen on the edges of streams and stretches of open water, along the banks of rivers and on the seashore, and on mud-flats, through nearly every month of the year, certainly from August to April, though of course it is much commoner in the winter months. It is generally solitary and is never at any time found in flocks like most of the other waders. The flight is short and jerky and the bird is as a rule much tamer than other species of sandpipers. It is also less noisy.

Sub-family *Scolopacinae***Snipe and Woodcock**

HERE, again, I have followed Blanford in separating the snipe and woodcock from the curlew and sandpipers (*Totantinae*) though there are gradations from one group to the other, while in all probability the painted snipe, *Rostratula*, is only distantly connected with either section.

The characters for the family lie in the lengthened bill, slightly broadened at the tip of the upper mandible, which is flexible and highly sensitive; legs comparatively short; the eyes large and placed far back on the head, only just in front of the ear.

All the species except the painted snipe are more or less migratory, but have no special seasonal or sexual plumages.

Three snipe—the fantail, the pintail and the Chinese—are common in Malaya, while there is one record of a woodcock. The jack snipe is unknown.

They will be described in detail and figured in a later volume.